**Physics of Time**

**Unit Plan**

One: Background on Einstein and Introduction to his ideas

KWL chart on Albert Einstein

Students watch Einstein Revealed (see time sheet) answer question, and respond in journal to beam of light question.

Two: Students work to define Time and create “clock covers” with definitions

Journal Reflection #2 (page 4)

Three: Complete and discuss Second Guessing sheet

Complete How Long Is A Second? and discuss

Experiencing a Lifetime role-play

Journal Reflections 3, 4 and 5 (pages 5, 6 and 7)

Four: Read The Past 757 Million Years on Earth and discuss

Journal Reflection 6 (page 8)

Read On The Relativity of Time and discuss

Journal Reflection 9 (page 11)

Create The Ultimate Time Device

Journal Reflection 7 (page 9)

Five: Work time for Time Device

Journal Reflection 8 (page 10)

Journal Reflection page 12

Define Light

Journal reflection 11 (page 13)

Six: Read selection about light clocks

Play with Light Clocks applet

Journal Reflection (page 14) Reflect upon your experiments with light clocks

Seven- Ten: Watch *Elegant Universe,* discuss in class, and respond in journal